ELEMENTAL STATMUX

Video Processing In The Cloud

Elemental® Cloud is a Platform as a Service (PaaS) that securely manages high-volume live and on demand video solutions in combination with the scale and elasticity of the cloud. The service automatically provisions and dynamically scales virtual Elemental instances, and can seamlessly integrate those resources with on site infrastructure to instantly expand video processing capacity. This flexibility enables video providers to rapidly enhance multiscreen video offerings, grow audiences, generate greater revenues, and decrease capital expenses.

EXPERIENCE THE BENEFITS

Capture New Viewers

The proliferation of viewing devices makes video delivery possible to a wider audience than ever before. New tablets and smart phones are flooding the market, but to reach them, providers must convert video libraries at irregular intervals to support numerous screen sizes and resolutions. Elemental Cloud lets video suppliers quickly and easily expand infrastructure to seamlessly scale with market growth.

Protect Your Audience

Media coverage of breaking news can unexpectedly drive demand for archived video from documentaries, interviews and other content. This influx of usage can overwhelm processing equipment and constrain production of key assets, driving viewers to other outlets. By using Elemental Cloud to elastically scale video processing up and down during these events, content providers can ensure transcoding capacity is always in line with demand.

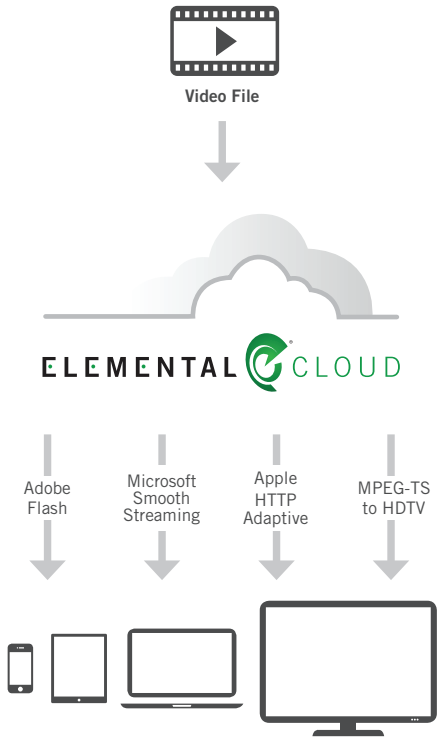
Extract Unrealized Revenue

The emerging multiscreen ecosystem is creating new revenue opportunities for archived content, but supporting the infrastructure for a one time project to convert a video library into new distribution formats can be cost prohibitive. Elemental's flexible, hybrid model provides access to infinite resources by conditioning large in-house data for secure, high-speed delivery to the cloud.

Maximize Existing Investments

Many companies overinvest in video infrastructure to avoid capacity shortages caused by market growth or usage spikes. Elemental Cloud enables providers to procure just the right amount of hardware to fulfill regular processing requirements, while leveraging cloud resources to keep pace with variable demand. This allows media professionals to economically balance transcoding capacity and optimize the video infrastructure they already have.

MULTISCREEN SUPPORT



Supports multiple adaptive formats and concurrent job processing. Simultaneously outputs a mix of files at different resolutions and bitrates for different delivery protocols.

SOFTWARE-DEFINED VIDEO

- Scalability - seamlessly add capacity to keep pace with growth
- Elasticity - quickly adjust resources as demand fluctuates
- Flexibility - accommodate multiple workflow scenarios
- Cost - replace capital investments with operational expenses

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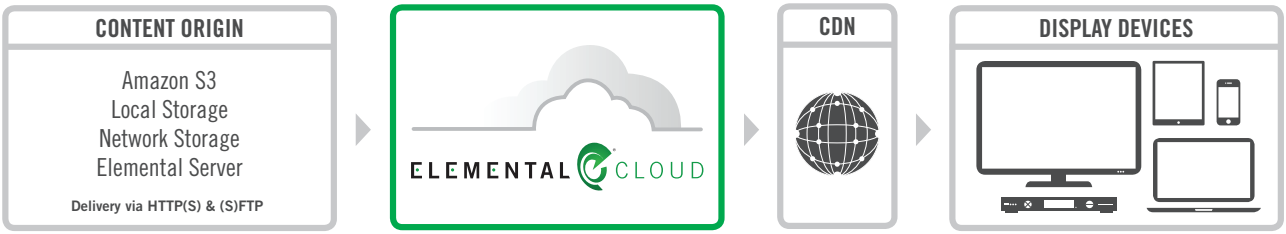
ELEMENTAL CLOUD WORKFLOW



Supported Adaptive Formats

Flash · Silverlight · Apple · DASH

FLEXIBLE WORKFLOW SUPPORT

Elemental Cloud addresses each of the following examples through integration with cloud-based infrastructure partners, ground-to-cloud processing appliances, and coordination across local and cloud-based resources.

A pure cloud workflow requires no on-site infrastructure. Aggregators that source content from studios or networks don't necessarily require equipment on premise to store or process video before it's distributed to end users. For these providers, Elemental Cloud facilitates the transfer of video directly from the source to the cloud to be processed without ever touching the ground.

A hybrid workflow (ground-to-cloud) integrates an on-site appliance with cloud-based video transcoding. Many content owners want to take advantage of cloud resources, but the value and size of professional grade video presents a challenge in transferring files. Elemental Cloud removes this obstacle by working in conjunction with an Elemental® Server system to condition and encrypt files for secure, accelerated transfer to the cloud.

A cloud-bursting workflow augments physical data centers with clusters of cloud resources. Many companies maintain video processing infrastructure, but the introduction of new devices and peak viewing can intermittently outpace capacity. Elemental Cloud allows providers to quickly meet the increase in demand by coordinating on-site transcoding with virtual resources in the cloud until the overflow is processed.

SPECIFICATIONS

Output Formats
- H.264 (Baseline, Main, High)
- MPEG-2
- VC-1 (Simple, Main, Advanced)
- AAC-LC/AAC-HE
- WMA2
- AC-3
- WAV

Output Protocols
- Flash Media Server (F4V)
- Microsoft Smooth Streaming (ISMV)
- Apple HTTP Adaptive (MPEG-TS)
- HTML5 Support
- CableLabs Compliant Option (MPEG-TS)
- Other HTTP Options (MPEG-TS)
- Omneon MediaDeck Options

Output Containers
- F4V
- ISMV
- ASF/WMV
- 3GP
- MP4
- MPEG-TS
- MOV
- MXF

System Control
- HTML-Based UI/REST API
- Fully Redundant
- Auto Failover
- Video Preview
- Real-Time Resource Monitoring
- Notification and Alerts
- Job Prioritization and Planning
- Pre and Post Processing Scripts
- User Level Account Control/ Authentication

Image Processing
- Motion Adaptive Deinterlacing
- Inverse Telecine Support
- Scene Change Detection
- Deblocking
- Anti-Alias Scaling
- Noise Reduction
- Lanczos Scaling
- Temporal Filtering
- Color Conversion
- Bilateral Filtering
- MPEG-2 Error Concealment

Other Features
- Apple ProRes 422 Decode
- Closed Caption Pass Through
- SCTE-35 Support
- Integrated Segmenter
- Logo Insertion
- Automated Load Balancing
- Multipass Encoding
- Thumbnail Creation
- Watchfolder Support
- Apple Store Compliant

Specifications Subject To Change Without Notice

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